



FF4

SEQUENZPROTOKOLL

<110> Forschungszentrum Juelich GmbH

<120> Valinherstellung

<130> P14PCT

<140> PCT/EP 00/01405

<141> 2000-02-21

<150> 199 07 567.0

<151> 1999-02-22

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<170> PatentIn Ver. 2.1

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<212> DNA

<213> Corynebacterium glutamicum

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<210> 2

<211> 612

<212> PRT

<213> Corynebacterium glutamicum

<400> 2

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Gly His Val His Leu Lys Asn Val Gly Asp Ile Val Ala Asp Ala Val
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Arg Lys Ala Gly Gly Val Pro Lys Glu Phe Asn Thr Ile Val Asp Asp
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Gly Ile Ala Met Gly His Gly Gly Met Leu Tyr Ser Leu Pro Ser Arg
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Glu Ile Ile Ala Asp Ser Val Glu Tyr Met Val Asn Ala His Thr Ala
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Asp Ala Met Val Cys Ile Ser Asn Cys Asp Lys Ile Thr Pro Gly Met
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Leu Asn Ala Ala Met Arg Leu Asn Ile Pro Val Val Phe Val Ser Gly
 130 135 140

Gly Pro Met Glu Ala Gly Lys Ala Val Val Val Glu Arg Val Ala His
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Ala Pro Thr Asp Leu Ile Thr Ala Ile Ser Ala Ser Ala Ser Asp Ala
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Val Asp Asp Ala Gly Leu Ala Ala Val Glu Arg Ser Ala Cys Pro Thr
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Cys Gly Ser Cys Ser Gly Met Phe Thr Ala Asn Ser Met Asn Cys Leu
 195 200 205

Thr Glu Ala Leu Gly Leu Ser Leu Pro Gly Asn Gly Ser Thr Leu Ala
 210 215 220

Thr His Ala Ala Arg Arg Ala Leu Phe Glu Lys Ala Gly Glu Thr Val
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Val Glu Leu Cys Arg Arg Tyr Tyr Gly Glu Glu Asp Glu Ser Val Leu
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Pro Arg Gly Ile Ala Thr Lys Lys Ala Phe Glu Asn Ala Met Ala Leu
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Asp Met Ala Met Gly Gly Ser Thr Asn Thr Ile Leu His Ile Leu Ala
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Ala Ala Gln Glu Gly Glu Val Asp Phe Asp Leu Ala Asp Ile Asp Glu
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Leu Ser Lys Asn Val Pro Cys Leu Ser Lys Val Ala Pro Asn Ser Asp
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Tyr His Met Glu Asp Val His Arg Ala Gly Arg Ile Pro Ala Leu Leu
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Gly Glu Leu Asn Arg Gly Gly Leu Leu Asn Lys Asp Val His Ser Val
 340 345 350

His Ser Asn Asp Leu Glu Gly Trp Leu Asp Asp Trp Asp Ile Arg Ser
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Gly Lys Thr Thr Glu Val Ala Thr Glu Leu Phe His Ala Ala Pro Gly
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Gly Ile Arg Thr Thr Glu Ala Phe Ser Thr Glu Asn Arg Trp Asp Glu
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Leu Asp Thr Asp Ala Ala Lys Gly Cys Ile Arg Asp Val Glu His Ala
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Tyr Thr Ala Asp Gly Gly Leu Val Val Leu Arg Gly Asn Ile Ser Pro
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Asp Gly Ala Val Ile Lys Ser Ala Gly Ile Glu Glu Leu Trp Asn
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Phe Thr Gly Pro Ala Arg Val Val Glu Ser Gln Glu Glu Ala Val Ser
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Val Ile Leu Thr Lys Thr Ile Gln Ala Gly Glu Val Leu Val Val Arg
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Tyr Glu Gly Pro Ser Gly Gly Pro Gly Met Gln Glu Met Leu His Pro
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Thr Ala Phe Leu Lys Gly Ser Gly Leu Gly Lys Lys Cys Ala Leu Ile
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Thr Asp Gly Arg Phe Ser Gly Gly Ser Ser Gly Leu Ser Ile Gly His
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Val Ser Pro Glu Ala Ala His Gly Gly Val Ile Gly Leu Ile Glu Asn
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Gly Asp Ile Val Ser Ile Asp Val His Asn Arg Lys Leu Glu Val Gln
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Val Ser Asp Glu Glu Leu Gln Arg Arg Arg Asp Ala Met Asn Ala Ser
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<212> DNA
<213> Corynebacterium glutamicum

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<210> 4
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 <213> *Corynebacterium glutamicum*

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 Arg Glu Ala Lys Val Asn Gly Gln Lys Val Ser Val Leu Thr Ser Tyr

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Leu Val Gly Asp Ser Ala Ala Asn Val Val Leu Gly Arg Asp Thr Thr		
50	55	60
Leu Ser Ile Thr Leu Asp Glu Met Ile Val Leu Ala Lys Ala Val Thr		
65	70	75
Ille Ala Thr Lys Arg Ala Leu Val Val Val Asp Leu Pro Phe Gly Thr		
85	90	95
Tyr Glu Val Ser Pro Asn Gln Ala Val Glu Ser Ala Ile Arg Val Met		
100	105	110
Arg Glu Thr Gly Ala Ala Ala Val Lys Ile Glu Gly Gly Val Glu Ile		
115	120	125
Ala Gln Thr Ile Arg Arg Ile Val Asp Ala Gly Ile Pro Val Val Gly		
130	135	140
His Ile Gly Tyr Thr Pro Gln Ser Glu His Ser Leu Gly Gly His Val		
145	150	155
Val Gln Gly Arg Gly Ala Ser Ser Gly Lys Leu Ile Ala Asp Ala Arg		
165	170	175
Ala Leu Glu Gln Ala Gly Ala Phe Ala Val Val Leu Glu Met Val Pro		
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Ala Glu Ala Ala Arg Glu Val Thr Glu Asp Leu Ser Ile Thr Thr Ile		
195	200	205
Gly Ile Gly Ala Gly Asn Gly Thr Asp Gly Gln Val Leu Val Trp Gln		
210	215	220
Asp Ala Phe Gly Leu Asn Arg Gly Lys Lys Pro Arg Phe Val Arg Glu		
225	230	235
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 <212> PRT
 <213> Corynebacterium glutamicum

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 35 40 45
 Ala Ser Ile Phe Val Asn Pro Leu Gln Phe Glu Ala Leu Gly Asp Cys
 50 55 60
 Asp Asp Tyr Arg Asn Tyr Pro Arg Gln Leu Asp Ala Asp Leu Ala Leu
 65 70 75 80
 Leu Glu Glu Ala Gly Val Asp Ile Val Phe Ala Pro Asp Val Glu Glu
 85 90 95
 Met Tyr Pro Gly Gly Leu Pro Leu Val Trp Ala Arg Thr Gly Ser Ile
 100 105 110
 Gly Thr Lys Leu Glu Gly Ala Ser Arg Pro Gly His Phe Asp Gly Val
 115 120 125
 Ala Thr Val Val Ala Lys Leu Phe Asn Leu Val Arg Pro Asp Arg Ala
 130 135 140
 Tyr Phe Gly Gln Lys Asp Ala Gln Gln Val Ala Val Ile Arg Arg Leu
 145 150 155 160
 Val Ala Asp Leu Asp Ile Pro Val Glu Ile Arg Pro Val Pro Ile Ile
 165 170 175
 Arg Gly Ala Asp Gly Leu Ala Glu Ser Ser Arg Asn Gln Arg Leu Ser
 180 185 190
 Ala Asp Gln Arg Ala Gln Ala Leu Val Leu Pro Gln Val Leu Ser Gly
 195 200 205
 Leu Gln Arg Arg Lys Ala Ala Gly Glu Ala Leu Asp Ile Gln Gly Ala
 210 215 220

Arg Asp Thr Leu Ala Ser Ala Asp Gly Val Arg Leu Asp His Leu Glu
225 230 235 240

Ile Val Asp Pro Ala Thr Leu Glu Pro Leu Glu Ile Asp Gly Leu Leu
245 250 255

Thr Gln Pro Ala Leu Val Val Gly Ala Ile Phe Val Gly Pro Val Arg
260 265 270

Leu Ile Asp Asn Ile Glu Leu
275